

## **REMARKS**

Claims 1-23 are pending in the application.

Claims 1-23 are rejected.

### **I. Drawings and Specification**

The drawings are objected to because labels of the figure are illegible. A set of formal drawings is submitted herewith, as required by the Office Action. The specification is objected to because of the absence of page numbers. A substitute specification with clear page numbering is submitted herewith. Therefore, withdrawal of these rejections is requested.

### **II. 35 U.S.C. § 102**

Claims 1, 5, 10-12 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Copeland (U.S. Patent No. 5,668,603). The Office Action asserts that Copeland teaches each element of claim 1. At 3.

Claim 1 is directed to a method for distorting a recording of projected images. The method comprises the steps of imposing modulated entities on video content of video source material, the modulated entities including artifacts incompatible with the video content, demodulating the modulated entities and projecting the video content to provide the projected images. An aspect of the invention is to distort the video source content in its raw form by imposing modulated entities on the video content. The modulated entities include artifacts incompatible with the video content, rendering the modulated video source material unpleasant to view. Accordingly, the modulated entities need to be demodulated prior to projecting the video content. See page 3, lines 5-9 and page 6, line 15 to page 17, line 16.

In contrast, Copeland is directed to a quite different system. Its purpose is to identify whether a video recording or video transmission is originating from an authorized source. See

col. 1, lines 15-18. The video signal 12 combined with the fingerprint data is outputted as fingerprinted video signal 34. The fingerprinted video signal 34 can be projected on a screen directly without disturbing the viewers. The fingerprinted video signal 34 can be read and analyzed by a fingerprint reader 40 (Fig. 3), so the source information can be determined.

Thus, Copeland does not teach “imposing modulated entities on video content of video source material, the modulated entities including artifacts incompatible with the video content” as in claim 1. The Office Action, referring to col. 2, lines 18-22, contends that this portion of Copeland teaches modulated entities including artifacts incompatible with the video content. However, the fingerprinted data is imperceptible to a viewer. See col. 1, lines 46-47. Therefore, it is compatible with the video content, precisely the opposite of claim 1. Further, Copeland does not teach “demodulating the modulated entities” of claim 1. The Office Action, referring to col. 3, lines 1-11, contends that this portion of Copeland teaches demodulating the modulated entities. However, the demodulation in Copeland has nothing to do with modulated entities including artifacts incompatible with the video content. The special demodulation is required for tracking the source of the recording by showing the fingerprint ID number. See col. 3, lines 62-67. Lastly, Copeland does not teach demodulating the modulated entities for projection. The fingerprinted data can be projected on a screen directly without disturbing the viewing of the audience. A special demodulation is required to reveal the fingerprint. Therefore, Copeland does not protect the video source material in its raw form. See col. 1, lines 44-47 and col. 2, lines 62-67.

With respect to claims 5, 10-12 and 23, these claims depend from claim 1 and therefore are allowable at least for the reasons stated above. Further, these claims are patentable for other novel matter disclosed therein. For example, claim 5 recites that the method of claim 1 further

comprising the step of encoding modulation information corresponding to the modulated entities, wherein the projection step further includes the step of decoding the modulation information. The Office Action, referring to col. 3, lines 54-56, indicates that this portion teach these features. But the decoding process in Copeland is only for retrieving the ID number for identifying the source of the piracy. It has nothing to do with the projection step. As stated earlier, in Copeland the video content is projected directly without demodulation.

### **III. 35 U.S.C. § 103**

#### **A. Copeland and Graf References**

The Office Action rejected claims 2-4 and 6-9 under 35 U.S.C. 103(a) as being unpatentable over Copeland in view of Graf et al. (Video Scrambling and Descrambling for Satellite and Cable TV). These claims depend from claims 1, directly or indirectly, and therefore are allowable for at least the reasons set forth with respect to claim 1.

With respect to claim 2, the Office Action admits that Copeland does not teach the steps of separating the video content into selected colors and varying at least one of a plurality of parameters of at least one of the selected colors. The Office Action, however, takes Official Notice that separating the video content into selected colors is conventional and well known. The Office Action further relies upon Graf for teaching the step of varying at least one of a plurality of parameters of at least one of the selected colors.

There is no teaching or incentive, found in the references themselves, to combine the references. Graf only generally discusses chroma transmission and does not teach how to vary at least one of a plurality of parameters of a particular color. Copeland is only directed to tracking the source of a recording and does not mention any color or color processing. There is no teaching or incentive for one of ordinary skill in the art to include a color separator, with the

ability to vary a parameter of a selected color, in Copeland's system, because that would make detecting the ID number much harder, thus rendering Copeland unsatisfactory for its intended purpose identifying the original source of a recording. Applicants respectfully remind the Examiner that

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

MPEP 2143.01.

Claims 2-4 and 6-9 depend from claim 2 directly or indirectly and therefore are allowable for the reasons stated in regard to claim 2. Further, these claims are patentable for other novel matter disclosed therein. Claims 4 and 6 recite the step of selecting a space for modulating the video content and modulating the video in the selected space, respectively. The cited portion of Copeland only talks about data blanking. Claim 7 recites that the parameter comprises intensity, the varying step including the step of determining the intensity as a function of position on the video content. The cited portion of Graf, however, does not teach intensity as a parameter, not to mention determining the intensity as a function of position on the video content. Regarding claim 8, the cited portion of Graf does not mention duty cycle. With respect to claim 9, the cited portion of Copeland does not teach determining a value of the parameter as a function of position on the video content, the function describing a modulation envelop which decreases a magnitude of the parameter to correct an alignment error, as recited in claim 9.

#### **B. Copeland and Guido References**

Claims 13, 17-19 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland in view of Guido (U.S. Patent No. 5,924,013). Regarding claim 13, the Office Action states that Copeland does not teach selectively deliverable modulation information

wherein the projection system demodulates the modulated entities according to the modulation information and introduces a recording device dependent interference, but Guido teaches these missing features. At 7-8.

**The Proposed Combination Still Does Not Teach Every Element of the Rejected Claims.**

Claim 13 is directed to video source material for a projection system. The video source material comprises modulated entities for providing artifacts incompatible with a video content of the video source material; and selectively deliverable modulation information. The projection system demodulates the modulated entities according to the modulation information and introduces a recording device dependent interference. According to one aspect of the invention, modulation information can be used to demodulate the modulated entities to render the entities imperceptible to a human during projection. Without the information, entities that can be seen by a human will appear on the video content. See page 9, lines 2-9.

The proposed combination does not teach every element of claim 13. The Office Action, referring to col. 2, lines 18-22, contends that Copeland teaches modulated entities for providing artifacts incompatible with a video content of the video source material. However, as stated earlier in regard to claim 1, Copeland does not teach modulated entities for providing artifacts incompatible with a video content of the video source material. The fingerprinted data is projected on a screen directly without disturbing the viewing of the audience. Guido is relied upon as teaching “wherein the projection system demodulates the modulated entities according to the modulation information.” At 8. However, the decoding process in Guido has nothing to do with modulated entities including artifacts that are incompatible with a video content. Guido is only directed to decoding digital data using a unique security code in order to allow a cinema to receive transmitted data. The unique security code in Guido is not used for demodulating the

modulated entities including artifacts incompatible with the video content. Therefore, the proposed combination does not teach “wherein the projection system demodulates the modulated entities according to the modulation information.” Further, the proposed combination does not teach “wherein the projection system ... introduces a recording device dependent interference,” as recited in claim 13. An aspect of the invention is that both originating video source material and recorded copies contain artifacts that degrade content of the material while maintaining high quality for legitimately viewed renditions. See page 3, lines 4-9 and page 7, lines 6-16. The cited portion of Guido does not teach adding such an interference for protecting the projected content from recording.

**There Is No Teaching Or Incentive, Found In The References Themselves, To Combine The References.**

The Office Action contends that “One would have been motivated to modify Copeland’s system as such in order to provide a secure transmission of information over insecure networks.” However, Copeland does not involve transmission of information over a network. It is only directed to inserting a fingerprint data into the video content for identifying the source of the piracy. Guido relates to transmission of cinematic data from a central location to a movie theater. The encoding process in Guido is only for an authorized theater to receive cinematic information. There is no teaching for one of ordinary skill in the art to use encoding and decoding techniques in Guido to scramble and descramble the fingerprinted data in Copeland, as suggested by the Office Action.

Regarding claim 14, the cited portion of Copeland does not mention a shape imposed on the video content. It only discusses data blanking. In regard to claim 15, applicants are not clear how the cited portion of Copeland teaches that the function decreases a magnitude of a

modulated parameter in proximity to an edge of the shape. Claim 16 depends from claim 13, and therefore is patentable at least for the reasons set forth with respect to claim 13.

With respect to claim 17, the Office Action rejects claim 17 on a similar basis as the rejection in regard to claim 13. Applicants repeat the same remarks set forth regarding claim 13, as these remarks are applicable in response to rejection of claim 17.

Claims 18-19 and 21-22 depend from claim 17 directly or indirectly and therefore are allowable for the reasons stated in regard to claim 17. Further, these claims are patentable for other novel matter disclosed therein. For example, claim 18 recites that the video source material includes film and wherein the modulation information is encoded on the film. The cited portion of Copeland only relates to fingerprinting data on an original film. However, no modulation information for demodulating the modulated entities are encoded on the film. Claim 19 recites that the modulated entities are color modulated and the modulator varies a projection rate of the modulated color. Copeland, however, does not involve any color modulation at all.

### **C. Copeland, Guido and Graf References**

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Copeland in view of Guido and in further view of Graf. Applicants herein incorporate the above argument regarding the lack of a motivation to combine these references.

Claim 20 depends from claim 17 and therefore is allowable for the reasons set forth regarding claim 17. Furthermore, the proposed combination does not teach the scanner and the color separator as recited in claim 20. The cited portion of Graf only generally discusses scanning and chroma transmission. However, Graf does not teach a “scanner” or “separator.”

#### **IV. Summary**

Having fully addressed the Examiner's objections and rejections, it is believed that in view of the preceding remarks, this entire application stands in a condition for allowance. If, however, the Examiner is of the opinion that such action cannot be taken, he is invited to contact the applicants' attorney at the number and address below in order that any outstanding issues may be resolved without the necessity of issuing a further Action. An early and favorable response is earnestly solicited.

Please address all future correspondence to Intellectual Property Docket Administrator, Gibbons, Del Deo, Dolan, Griffinger & Vecchione, One Riverfront Plaza, Newark, NJ 07102-5496. Telephone calls should be made to Vincent E. McGeary at (973) 596-4837 or (973) 596-4500.



V. Fees

If any additional fees are due in respect to this amendment, please also charge them to Deposit Account No. 03-3839.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "V E McGeary", is written over a horizontal line.

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